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## AUTOMATION, JOBS AND THE GOLDEN RULE

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It is obvious to all except a few who resolutely bury their heads in IBM cards that our society is in the throes of technological transition. The rapid development of familiar technology and the discovery of new devices has seriously affected the ability of agriculture and big industry to provide the millions of jobs required. Every week, more jobs disappear and even more are threatened.

Clearly, it is essential to examine the various effects of these changes upon our political, cultural and social institutions. In particular, there has been much talk about a Society of Leisure in which only a few favored people would be permitted to work, with the remainder of the population condemned to the dreariness of enforced idleness. From this it is a simple step to the prediction that capitalism, American style, cannot survive automation.

I feel that these views are incorrect. This is not to say that serious difficulties could not arise if a laissez-faire attitude were adopted. It seems clear, however, that people are concerned, and things are being done and will be done. With a modicum of intelligent planning, we will emerge from the transition zone with a society that is better and stronger in every way. I make

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this prediction based on the following premise: Rather than a shortage of jobs, there is a shortage of manpower for the jobs that have to be done. Furthermore, the majority of these do not require years of specialized training.

All we have to do to create these millions of jobs is to look around us and observe the needs of people: young people, middle-aged people, old people, well people, sick people, working people, retired people. Automation has forced us to focus on people. Henceforth, in place of people taking care of machines in factories, people will take care of each other.

Let me briefly indicate the areas where human services are urgently needed. I will discuss only a few of these, and then rather sketchily.

### 1. Schools

The overcrowding in our schools is serious. Hundreds of thousands of teachers at all levels, from public school through graduate school are required in order to reduce the ratio of instructor to student to the level where each child can receive the personal attention so necessary for intellectual and psychological development.

In addition to instructors in the standard subjects, we need teachers of art, music, dancing, foreign languages, tennis, and so on, to provide the audience for the new Renaissance.

### 2. Special Schools for Children

A sizeable fraction of all children in ordinary schools at the present time have various physical difficulties, in hearing, in vision, psychological, muscular, etc., that require special care. A much higher ratio of instructor to student is needed here.

### 3. Police

Every police force in the country is understaffed, and most are grossly underpaid—as opposed to being merely underpaid. It is generally accepted that more policemen on the beat and more in patrol cars would make the streets of big cities considerably safer.

Naturally, it will be difficult to find enough men and women who are qualified for the job of actually dealing with criminals. But many men could be used purely for patrol purposes with their sole function that of reporting incidents, and of being seen.

### 4. Traffic

We allow forty thousand fatalities a year and hundreds of thousands of serious accidents. Clearly, hundreds of thousands of people are needed, in various capacities, to stamp out this epidemic, and to make driving a pleasure rather than a chore. There is no reason why traffic control should remain a responsibility of the Police Department.

### 5. Esthetics

We need a sustained effort to beautify American cities, and to preserve parks, lakes, etc.

### 6. Garbage, Sewage

The disposal of the wastes of civilization is one of our major problems yet very little has been done comparable, let us say, to the effort devoted to putting a man in space.

### 7. Noise Abatement

One of the serious aspects of large city life is the tremendous volume of noise that one is exposed to constantly. A major field in the future will be that of noise engineering.

## 8. Hospitals

The wealthiest nation in the world does not have a good score either as far as medical services or hospital services are concerned.

## 9. Old Age

The problem of what to do with old people who can be kept alive indefinitely with modern drugs, operations, etc. is pressing. Where to house them, and how, and so on? Our treatment of the elderly is, from all that I have read, the most callous of any great civilization.

## 10. The Home

There are millions of automatic jobs for women at home, raising children and managing the house. The great majority of women go to work for economic reasons, not because they want to. It is generally accepted that husbands and children, and thus society, suffer from this. Why not accept "housewife" as a legitimate occupation with a salary paid by the city, state and federal government? In this way, jobs are created at home, and the jobs in industry vacated by women are available for the principal wage-earner.

I realize, from experience in presenting this suggestion, what it does to the blood pressure of feminists. But it should be a voluntary affair, and, after all, men and women are biologically different.

I think that the foregoing list is sufficient to illustrate my thesis that any even half-hearted attempt to meet human needs will provide our society with more than enough jobs for all those who wish to work. Certainly, computers and other technological devices will play a significant role in carrying out these tasks. But the major choices and the decisions will be made by human beings. There is absolutely no reason to believe that in any important sphere of activity, man will be subservient to a machine.

It is perhaps fitting to note that after all of these years the salvation of our scientific society resides in the application of the Golden Rule: Do unto others as you would have others do unto you.